# REMARKS

Claims 1-34 are pending in this application. Claims 2, 3, 4 and 16 are amended in several particulars for purposes of clarity in accordance with current Office policy, to assist the examiner and to expedite compact prosecution of this application. The Applicant appreciates the Examiner's indication of allowability concerning claims 6, 10, 21, 27 and 29 through 33.

## I. Claim Rejections - 35 USC § 112

The Examiner stated that Claims 3-4 recite the limitation "the number of pixels" in Line 2 of both claims as there is insufficient antecedent basis for this limitation in the claim. Therefore, claims 3 and 4 were amended according to the suggestions of the Examiner.

## II. Claim Rejections - 35 USC § 102

No claim is anticipated under 35 U.S.C. §102 (b) unless all of the elements are found in exactly the same situation and united in the same way in a single prior art reference. As mentioned in the **MPEP §2131**, "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Every element must be literally present, arranged as in the claim. *Richardson v. Suzuki Motor Co.,* 868 F.2d 1226, 9 USPQ2d 1913, 1920 (CAFC 1989). The identical invention must be shown in as

complete detail as is contained in the patent claim. *Id.*, "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson,* 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970), and MPEP 2143.03.

**A. Claims 1-2, 11, 13, 15-16, 22-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsai et al (US 6,392,762). The Applicant respectfully traverses.**

1. The Examiner stated that regarding claim 1, which is representative of claims 15, 22, Tsai discloses an apparatus for correcting a scanning error in a flatbed scanner, the apparatus comprising: a white shading plate having a black patch; a reading module accommodating reading of said white shading plate and said black patch; and a controller comparing information of said black patch read by said reading module with a predetermined reference value to correct the scanning error in the . flatbed scanner (Col 1 Lines 47-67; Col 5 Lines 24-62).

However, as seen in col. 1 and col. 5 of Tsai, the controller never compares the information of the black patch that read by the reading module with a predetermined reference value. In col. 5, lines 55-62 state that after reading the color block 422 that the CCD moves further a predetermined distance L2 beyond the color block 422. However, here there is no need for any comparison to be made by a controller of information of the colored block with a predetermined reference value. A step of addition is different than a step of comparison of two values.

Rather than comparing the read values with a predetermined value in order to correct for error as in the present invention, Tsai only reads a location and adds a predetermined value. As mentioned

in col. 8, lines 37-38, the shift is predetermined.

2. The Examiner states that regarding claim 2, which is representative of claim 16, Tsai teaches said controller correcting the scanning error by using information of at least one of the edge lines of said black patch read through said reading module and information of at least one of the intervals of said black patch (Col 5 Lines 1-23).

As amended, Tsai fails to disclose during a comparison determining the difference between the edge lines and intervals with reference values. As mentioned, above, Tsai adds the length to the read value. The edge line and interval information are not compared with the plurality of reference values as seen in the presently claimed invention.

The amended claims 2 and 16 are supported by all the drawings and the related disclosure including for example figure 4 and its related disclosure.

3. The Examiner states that for claim 11, Tsai discloses the predetermined reference value being set based on a pattern of said black patch (Col 5 Lines 63-Col 6 Line 2; Fig 4).

However, as seen in the last paragraph of column 5 into column 6, L0 and L2 are predetermined and L1 is calculated according to the coordinates of the colored block and then the CCD moves the distance of L0+L1+L2. However, the predetermined values are not compared with the read values. The predetermined values L0 and L2 are simply added to the determined value of L2 and the CCD moves according to such distances.

4. The Examiner states that for claim 13, Tsai discloses a transparent glass on which a document is placed and a buffer storing an image read through said reading module, with the controller controlling the output of the image stored in the buffer to correct the scanning error (Fig 4; Col 5 Lines 1-23).

However, Tsai never actually discloses that the controller controls the output of the image stored in the buffer to correct the scanning error. Col. 5 talks of marked document line 421 and the first pixel units. However, the image that is actually stored is not used and it is not used by the controller to correct the scanning error.

5. For claim 25, the Examiner states that Tsai discloses detecting information of said black patch further comprising of checking whether an interval of said white shading plate between a first edge of said black patch and a second edge of said black patch is detected to have white pixels (Col 1 Lines 47-67; Col 5 Lines 24-62).

Both the first edge and second edge is not disclosed to be checked for white pixels. The specific disclosure is not given in Tsai.

6. For claim 26, the Examiner states that Tsai teaches extracting the number of pixels corresponding to an interval said reading module is moved vertically on said black patch (Figs 9-10).

However, Tsai does not include a figure 9 or 10. Figures 9 and 10 are only in Shimamura and if that reference is used here, a 35USC§102 rejection would then be improper.

Looking further into Tsai, col. 5, lines 1-22 of Tsai generally talk of pixel units, but that

concerns the pixels in the CCD. There is no extraction of the pixels corresponding to intervals read

by the module. The translation is never made and such is not extracted with regard to the vertical

motion on the black patch. In col. 1, Tsai also mentions that in certain scanners, rather than moving

pixel by pixel, the image pickup module is moved a predetermined distance. Col. 1, lines 31-34.

### III. Claim Rejections - 35 USC § 103

According to MPEP 706.02(j), the following establishes a *prima facie* case of obviousness

under 35 U.S.C. §103:

> To establish a *prima facie* case of obviousness, three basic criteria
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> must be met. First, there must be some suggestion or motivation,
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> either in the references themselves or in the knowledge generally
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> available to one of ordinary skill in the art, to modify the reference or
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> to combine reference teachings. Second, there must be a reasonable
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> expectation of success. Finally, the prior art reference (or references
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> when combined) must teach or suggest all the claim limitations. The
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> teaching or suggestion to make the claimed combination and the
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> reasonable expectation of success must both be found in the prior art
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> and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20
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> USPQ2d 1438 (Fed. Cir. 1991).

**A. Claims 5, 7-9, 12, 14, 17-20, 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai et al (US 6,392,762) in view of Shimamura et al (US 6,246,484). The Applicant respectfully traverses.**

The Examiner stated that regarding claim 5, which is representative of claim 19, that Tsai does not disclose expressly a scan region based on the detection of a rightmost edge line of said black patch through said reading module and a position of a first pixel being read obtained during reading of said white shading plate to correct a scanning error for the position of the first pixel being read, but that Shimamura discloses a scan region based on the detection of a rightmost edge line of said black patch through said reading module and a position of a first pixel being read obtained during reading of said white shading plate to correct a scanning error for the position of the first pixel being read (Figs 16; 21; Col 11 Lines 24-50).

However, looking at col. 11, lines 24-50, Shimamura teaches detecting the lower edge of a sheet and the upper edge margin of the recording sheet. The recording sheet is being taught and suggested and it has nothing to do with the black patch. Figure 16 only discusses the reading position of the white reference sheet also and figure 21 also concerns the sheet.

The Examiner states that the suggestion/motivation to combine with Tsai is for doing so would have been to correct scanning error for the pixel being read.

However, such a motivation is not clear and particular in that it does not explain why one would be motivated to combine the teachings of examining the edge of a recording medium and applying it instead to the black patch. " "Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing

together the prior art to defeat patentability. *In re Dembiczak*, 175 F.3d 994, 50 USPQ.2d 1614 (Fed. Cir. 1999). The showing must be "clear and particular" without broad generalized conclusory statements. *Id.* There must be specific statements showing the scope of the suggestion, teaching, or motivation to combine the prior art references. *Id.* at 1000. There must be an explanation to what specific understanding or technical principle would have suggested the combination of references.

In fact Shimamura might then be teaching away from the claimed invention in that it is applying to the recording medium rather than using the black patch.according to MPEP §2145, "It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983). This portion of Shimamura cannot be just ignored because according to MPEP §2141.02, "A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984)." Therefore, taken as a whole, the combined references do not teach or suggest the claimed limitation.

2. For claim 7, which is representative of claim 20, Shimamura discloses setting a scan region based on the detection of the top edge line and a bottom edge line of said black patch read through said reading module and an interval by which the reading module is moved from the top edge line to the bottom edge line (Figs 9-10).

However, figure 9-10 include the white reference sheet 400 and the spurs 25 which are a metallic spur rotatively and axially supported by a spur holder 27 and incorporated in a guide rail 29

simultaneously. The hashed lines are where the spurs may abut as mentioned in col. 12 of·

Shimamura. This is quite clearly not relating to black patch area but again merely the white

reference sheet. The white reference sheet is inserted into the scanner for the correction. Therefore,

the top edge lines and bottom edge lines of the black patch cannot be taught by Shimamura when

specifically, Shimamura is only talking of the white reference sheet as related to the spurs.

Therefore, when combined with Tsai, the combination cannot teach or suggest the claimed invention.

3. The Examiner states that for claim 8, which is representative of claims 17, Shimamura

discloses setting the scan region accommodating a skew of said reading module being corrected by

comparing the interval by which said reading module is moved with a predetermined reference value

(Fig 1; Col 4 Lines 20-33).

However, col. 4, lines 20-33 specifically mention that the white reference sheet is used for

shading correction. Further, Shimamura mentions the reference numeral 30 for the left side for use

of sheet member so to position the recording sheet, but this does not teach or suggest comparing the

interval by the reference value, nor does it accommodate a correction of the skew.

4. The Examiner states that for claim 9, which is representative of claim 34, Shimamura

teaches a controller adjusting a scan rate based on predetermined right and left intervals with respect

to the center of said black patch read through said reading module (Fig 10).

Again, as seen in figure 10, the white reference sheet is correcting for the gray and the hashed·

portion is not the black patch, but where the spurs 25 abut each other when the white reference sheet

is inserted. col. 12, lines 26-33. Moreover, even when combined with Tsai, such hatched areas cannot be correlated to the colored portion of Tsai as Shimamura is relating only to the reference sheet.

5. For claim 12, Shimamura teaches a memory for storing the predetermined reference value (Col 9 Lines 34-41).

However, col. 9 only states that reference numeral designates the memory device, but not that the reference value is stored in the memory. Moreover, Shimamura fails to teach the proper reference values being stored in the memory as claimed in the present invention.

6. For claim 14, Shimamura teaches said black patch including a center dividing said black · patch into two equal patterns, said black patch being symmetric about the center line (Fig 9).

However, first figure 9 is not dealing with black patch, but are only hatched areas relating to the spurs. Moreover, drawing shows that there is not equal patterns on both sides as there is even a break on one portion on the L side that makes it not symmetrical about the center line.

7. For claim 18, the Examiner states that Shimamura discloses a scanning start line being corrected based on the detected difference (Col 4 Lines 20-33).

However, col. 4, lines 20-33 only mentions the white reference sheet 400 and left side reference guide 30 which is structured to position the recording sheet, but fails to discuss the detection of difference of the interval.

8. For claim 28, the Examiner states that Shimamura teaches detecting a first pixel being read while reading of said white shading plate; and detecting a pixel difference between where the first pixel is read and the point where the edge line has been detected (Col 4-Col 9).

However, the edge lines relate to the black patch and Shimamura does not include the black patch. Tsai includes a colored portion, but there is no teaching as to the difference between the first pixel and the edge of the black patch. The Federal Circuit has mentioned that "[t]he test for obviousness is not whether the features of one reference may be bodily incorporated into another reference...Rather, we look to see whether combined teachings render the claimed subject matter obvious." *In re Wood*, 599 F.2d 1032, 202 USPQ 171, 174 (CCPA 1979) (citing *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549-50 (CCPA 1969); *In re Mapelsden*, 329 F.2d 321, 322, 141 USPQ 30, 32 (CCPA 1964). Here, it is clear that there is no teaching in the combined references as to the claimed limitations.

## IV. 37 C.F.R. §1.104

Further clarification by Examiner would be very helpful to the Applicant. Respectfully, the Examiner must provide the completeness in the rejection under 37 C.F.R. §1.104(b) and (c) in formulating the rejection. As mentioned in 37CFR §1.104 (c)(2), "When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable." The particular parts relied upon were not mentioned and therefore it makes it difficult for the Applicant to respond to the Examiner's rejection. The ·

Applicant appreciates that the Examiner provided certain line text section, however since some of

the line text were 20 lines or much more (*e.g.*, claim 28 rejection under 35USC§103 mentioned the

entire columns 4 through 9) , it was difficult at time to determine the particular parts being relied

upon. The Applicant would greatly appreciate the Examiner's help in this matter.

### V. Allowable Subject Matter

The Examiner stated that Claims 6, 10, 21, 27, 29-33 are objected to as being dependent upon

a rejected base claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

The applicant appreciates the examiner's indication of allowability pertaining to claim 6, 10,

21, 27, 29-33 . In accordance with 37 C.F.R. § 1.111(b), the applicant respectfully requests that the ·

examiner temporarily hold objections and requirements as to form in abeyance until the remarks and

amendments in this Amendment are considered by the examiner.

In view of the foregoing amendments and remarks, all claims are deemed to be allowable and

this application is believed to be in condition to be passed to issue. If there are any questions, the

examiner is asked to contact the applicant's attorney.

No fee is incurred by this Amendment. Should there be a deficiency in payment, or should

other fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of

Applicant's undersigned attorney in the amount of such fees.

Respectfully submitted,

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